

TVS-8500

A new high-performance infrared thermal imager.



CMC Electronics Cincinnati has combined cutting-edge defense technology with a patented InSb focal plane array architecture to provide a multi-use platform for industrial, environmental and aerospace applications.

User-friendly, this unit integrates features that ensure high efficiency and high productivity.

- Five moveable cursors display critical temperatures on the built-in 5" liquid crystal screen.

- High-fidelity images are acquired at 120 frames per second over a temperature measurement range of -40°C to 900°C with the option to extend beyond 2000°C.
- Notable features include: 14 bit digital video resolution (16384 cf. typical 4096 levels), DRAM for on board real time recording and analysis, Compact Flash Card Drive, IEEE 1394 FireWire interface and hand-held keypad for remote operation.

TVS-8500 System Parameters

1. Sensor	Insb two dimensional focal plane array
2. Pixel Number	256 x 256
3. Coolant	Integrated Stirling cooler, 7 minutes typical cooldown
4. Cold Filter	Twin peaks filter (3.4-4.1 and 4.5-5.1 μm)
5. Measurement Temperature Range	-40°C to 900°C (up to 2,000°C with special filters) Six overlapping ranges for best measurements <0.020°C at 30°C
6. Temperature Sensitivity (NETD)	$\pm 2\%$ or $\pm 2^\circ\text{C}$ whichever is greater
7. Measurement Temperature Accuracy	120 frames/sec
8. Sensor Frame Speed	60 frames/sec (NTSC), 50 frames/sec (PAL)
9. Displayed Frame Rate	14 bit (16,384 data levels per range)
10. A/D Conversion	Brightness/contrast (temperature/sensitivity) Manual and automatic
11. Image Adjustment Function	Focal length 30 mm, F/#4 (manual focusing)
12. Standard Lens	14.6°H x 13.7°V; 1 mrad spatial resolution
13. Field of View & Instant FOV	30 cm to infinity
14. Focus Range	Hand/mouse controller for menu/function selection
15. Control	Multiple-points (5) user selectable/moveable temp cursors Emissivity compensation Setting of temperature range/level (auto & manual) Isotherms; X,Y line temperature profiles Setting display color, and b&w polarity Multiple frame averaging Electronic zooms (2X , 4X); Freeze Minimum/maximum temperature indication Custom memos and names of files and directories Image record, save and play back
16. Functions	Manual individual frames or automated interval sequences Temperature threshold triggering (point or area) Recording/playing back thermal data on PCMCIA card Formats: 14 bit IRI, TIFF, time/temp recording LOG (text)
17. Data Storage	PCMCIA compact flash card (max. 48Mb) 16 MB standard card stores 100 frames
18. Media	Remote controller (also mouse compatible) External trigger and external sync RS-232C; IEEE 1394
19. External Interfaces	AC 100/200V, 50/60Hz (using AC adapter)
20. Power Supply	5" LCD; External video output
21. Display	30W or less (typical operating conditions)
22. Power Consumption	0 to 40°C, 90% RH or less (non-condensing) 1.5G/100Hz (vibration) 5G/11 msec (shock)
23. Environment Condition	Approx. 200 mm (W) x 250 mm(D) x 120 mm (H)
24. Outward Dimensions	Approx. 5 kg
25. Weight	3x wide FOV, close-up, and micro lenses
26. Option	

System includes: TVS-8500 Series Camera, Standard 30 mm lens, AC power adapter, Hand remote controller, Compact flash card memory (1) & adapter (1), Manual, Hard shell case and tripod with soft case.

Infrared Products ~ 7500 Innovation Way ~ Mason, Ohio 45040-9699 U.S.A.

Tel: 1-800-852-5105 ~ Fax: 513-573-6290 ~ Visit our web site at www.cmccinci.com/products/infrared/ir ~ e-mail: irproductsales@cmccinci.com